

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method comprising:
receiving an indication on a network component that one or more packets have been received from a network;
splitting each of the one or more packets into a header and a payload and posting each of the header and payload to one or more post buffers, using the network component;
~~the network component~~ notifying a TCP-A (transport control protocol – accelerated) driver, by the network component, that the one or more packets have arrived;
~~a TCP-A driver~~ performing, using the TCP-A driver, TCP stack processing by parsing ~~[[a]]~~ the header in at least one of the one or more packets to determine the protocol context associated with a current connection, and performing, using the TCP-A driver, TCP protocol compliance for the at least one of the one or more packets; and
~~the TCP-A driver~~ performing one or more operations, using the TCP-A driver, that result in a data movement module retrieving one or more payloads of the at least one of the one or more packets from an associated post buffer and placing the one or more corresponding payloads of the at least one of the one or more packets into a read buffer wherein the data movement module comprises a DMA (direct memory access) engine.
2. (Cancelled).
3. (Currently Amended) The method of claim ~~[[2]]~~ 1, wherein the TCP-A driver performs packet processing by processing each of the headers, the method additionally comprising fetching a next header of the one or more headers prior to completing the processing of the current header.
4. (Previously Presented) The method of claim 1, wherein said TCP-A driver performing one or more operations that result in a data movement module placing one or more corresponding payloads of the at least one of the one or more packets into a read buffer

comprises sending a request to a data movement module driver to write the one or more corresponding payloads to the read buffer.

5. (Cancelled).

6. (Cancelled).

7. (Currently Amended) The method of claim [[6]]1, wherein the DMA engine resides on a chipset.

8. (Currently Amended) The method of claim [[6]]1, wherein the DMA engine resides on a host processor as a support module.

9. (Original) The method of claim 1, additionally comprising:
receiving a request on an operating system to transmit data over the network;
the operating system notifying the TCP-A driver that there is data to be transmitted;
the TCP-A driver performing one or more operations that result in the data being transmitted to the network component;
in response to receiving the data, the network component creating one or more packets for transmission by packetizing the data; and
the network component transmitting the one or more packets over the network.

10. (Currently Amended) An apparatus comprising:

a network component ~~capable of~~ configured to:

~~receiving~~ receive an indication ~~on a network component~~ that one or more packets have been received from a network;

split each of the one or more packets into a header and a payload and post each of the header and payload to one or more post buffers; and

notifying a TCP-A (transport control protocol – accelerated) driver that the one or more packets have arrived; and

~~[[a]]~~the TCP-A driver ~~capable of configured to:~~

performing packet processing by parsing ~~[[a]]~~the header in at least one of the one or more packets to determine the protocol context associated with a current connection, and performing TCP protocol compliance for the at least one of the one or more packets; and

~~the TCP-A driver performing~~ one or more operations that result in a data movement module retrieving one or more payloads of the at least one of the one or more packets from an associated post buffer and placing the one or more corresponding payloads of the ~~at least one of the one or more packets~~ into a read buffer.

11. (Currently Amended) The apparatus of claim 10, additionally comprising an operating system ~~capable of configured to:~~

Receiving ~~receive~~ a request to transmit data over the network; and
notifying ~~the~~ TCP-A driver that data is ready to be transmitted;
wherein:

the TCP-A driver is capable of performing one or more operations that result in the data being transmitted to the network component; and
the network component is capable of:

creating one or more packets for transmission by packetizing the data in response to receiving the data; and
transmitting the one or more packets over the network.

12. (Cancelled).

13. (Currently Amended) The apparatus of claim ~~[[12]]~~10, wherein the TCP-A driver performs packet processing by processing each of the headers, and the TCP-A driver is additionally capable of fetching a next header of the one or more headers prior to completing the processing of the current header.

14. (Currently Amended) A system comprising:
- a chipset having a DMA (direct memory access) engine, the chipset communicatively coupled to a TCP-A (Transport Control Protocol – Accelerated) driver of a processor and to a network component;
- the network component ~~capable of configured to:~~
- ~~receiving~~ receive an indication that one or more packets have been received from a network;
- ~~split each of the one or more packets into a header and a payload and post each of the header and payload to one or more post buffers;~~ and
- notifying the TCP-A (transport control protocol – accelerated) driver that the one or more packets have arrived; and
- the TCP-A driver of the processor ~~capable of configured to:~~
- ~~performing~~ packet processing by parsing ~~[[a]]the~~ header in at least one of the one or more packets to determine the protocol context associated with a current connection, and performing TCP protocol compliance for the at least one of the one or more packets; and
- ~~performing~~ one or more operations that result in a data movement module retrieving one or more payloads of the at least one of the one or more packets from an associated post buffer and placing the one or more corresponding payloads of the at least one of the one or more packets into a read buffer.
15. (Currently Amended) The system of claim 14, additionally comprising an operating system of the processor ~~capable of configured to:~~
- ~~receiving~~ receive a request to transmit data over the network; and
- notifying the TCP-A driver that data is ready to be transmitted;
- wherein:
- the TCP-A driver is capable of performing one or more operations that result in the data being transmitted to a network component; and
- the network component is capable of:

creating one or more packets for transmission by packetizing the data in response to receiving the data; and

transmitting the one or more packets over the network.

16. (Cancelled).

17. (Currently Amended) The system of claim [[16]]14, wherein the TCP-A driver performs packet processing by processing each of the headers, and the TCP-A driver is additionally capable of fetching a next header of the one or more headers prior to completing the processing of the current header.

18. (Currently Amended) A machine-readable medium having stored thereon instructions, the instructions when executed by a machine, result in the following:

receiving an indication on a network component that one or more packets have been received from a network;

the network component splitting each of the one or more packets into a header and a payload and posting each of the header and payload to one or more post buffers;

the network component notifying a TCP-A (transport control protocol – accelerated) driver that the one or more packets have arrived;

[[a]]~~the~~ TCP-A driver performing packet processing by parsing [[a]]~~the~~ header in at least one of the one or more packets to determine the protocol context associated with a current connection, and performing TCP protocol compliance for the at least one of the one or more packets; and

the TCP-A driver performing one or more operations that result in a data movement module retrieving one or more payloads of the at least one of the one or more packets from an associated post buffer and placing the one or more corresponding payloads of the at least one of the one or more packets into a read buffer, wherein the data movement module comprises a DMA (direct memory access) engine.

19. (Cancelled).

20. (Currently Amended) The machine-readable medium of claim [[19]]18, wherein the TCP-A driver performs packet processing by processing each of the headers, the instructions additionally result in fetching a next header of the one or more headers prior to completing the processing of the current header.

21. (Original) The machine-readable medium of claim 18, wherein the instructions that result in performing one or more operations that result in a data movement module placing one or more corresponding payloads of the at least one of the one or more packets into a read buffer additionally result in sending a request to a data movement module driver to write the one or more corresponding payloads to the read buffer.

22. (Original) The machine-readable medium of claim 18, wherein the instructions that result in said TCP-A driver performing one or more operations that result in a data movement module placing one or more corresponding payloads of the at least one of the one or more packets into a read buffer additionally result in programming the data movement module to write the one or more corresponding payloads to the read buffer.

23. (Cancelled).

24. (Currently Amended) The machine-readable medium of claim [[23]]18, wherein the DMA engine resides on a chipset.

25. (Currently Amended) The machine-readable medium of claim [[23]]18, wherein the DMA engine resides on a host processor as a support module.

26. (Original) The machine-readable medium of claim 18, the instructions additionally result in:

receiving a request on an operating system to transmit data over the network;
the operating system notifying the TCP-A driver that there is data to be transmitted;

the TCP-A driver performing one or more operations that result in the data being transmitted to the network component;

in response to receiving the data, the network component creating one or more packets for transmission by packetizing the data; and

the network component transmitting the one or more packets over the network.